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EXAMINER	
PONNALURI, PADMASHRI	
ART UNIT	**PAPER NUMBER**
1639	

DATE MAILED: 12/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/726,624	LI, MIN	
	Examiner	Art Unit	
	Padmashri Ponnaluri	1639	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 September 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,5,9,17,22,45,47,48,50,51,53-59,61-63 and 65-75* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,5,9,17,22,45,47,48,50,51,53, 55-56, 58-59,61-63 and 65, 67-68, 70-75* is/are rejected.

7)☒ Claim(s) *54,57,66 and 69* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The amendment and the response filed on 9/27/05 has been fully considered and entered into the application.

2. Claims 46, 49 and 60 have been canceled by the amendment filed on 9/27/05.

3. Claims 1, 5, 9, 17, 22, 45-45, 47-48, 50-51, 53-59, 61-63, 65-75 are currently pending and are being examined in this application.

4. Claims 1, 5, 9, 17, 22 have been amended by the amendment filed on 9/27/05.

Priority

5. This application is a divisional of 08/861,572, which claims priority to provisional application 60/018,074 filed on 5/22/96.

Maintained Claim Rejections

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. The rejection of claims 1, 5, 9, 17, 45-51, 53, 55-56, 58-65, 67-68, 70-72 under 35 U.S.C. 102(e) as being anticipated by US Patent 5,627,024 (Maruyama et al) (filing date 8/5/94) has been maintained for the reasons of record set forth in the previous office action mailed on 6/27/05.

8. The rejection of claims 1, 5, 9, 17, 45-51, 53, 55-56, 58-65, 67-68, 70-75 under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,627,024 (Maruyama et al) and US Patent 5,922,545 (Mattheakis et al) has been maintained for the reasons of record set forth in the previous office action mailed on 6/27/05.

New Claim Rejections Necessitated by the Amendment

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 1, 5, 9, 17, 22, 45-45, 47-48, 50-51, 53, 55-56, 58-59, 61-63, 65, 67-68, 70-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,627,024 (Maruyama et al) (filing date 8/5/94).

The instant claims briefly recite a method of detecting the presence of a cellular protein on the surface of a cell in a sample using a detectable, recombinant virus expressing a ligand on its surface which specifically binds to the cellular protein, comprising contacting the sample with a population of the detectable, recombinant virus expressing on its surface the ligand for the cellular protein; and detecting binding of the virus to cells in the sample, thus detecting the presence of the cellular protein in the sample.

Maruyama et al teach lambdoid bacteriophage vectors (refers to the instant claims virus is a bacteriophage) for expression and display of foreign proteins. The reference teaches that the phage library screening can be utilized to enrich the library for one or more particles expressing a multimer having a preselected substrate or ligand binding specificity. The reference further teaches that the phage library is a population of particles enriched for a preselected ligand binding specificity (refers to instant claim limitation 'each virus expressing on its surface the ligand for the polypeptide') (i.e., see column 30). The reference teaches that the phage library comprises a population of particles, and hundreds of fusion proteins on the particle surface (refers to instant claim 'at least 10 copies of ligand', 'at least 100 copies of ligand', and 'at least 400 copies of ligand') depending on growth conditions and other factors (i.e,. see column 30). The reference teaches that the library of phage (monovalent phage) having the pV-derived membrane anchor will typically contain 1-4 copies of the ligand-binding complex on the surface of each particle, and a library of phage (polyvalent phage) having the pD-derived membrane anchor will typically contain 20-420 copies of the ligand-binding complex on the surface of each particle (refers to instant claim 'at least 10 copies of ligand', 'at least 100 copies of ligand', and 'at least 400 copies of ligand') (i.e., see column 15). The reference teaches that the population of phage express the same multimer on the particle surface and such phage are homogeneous and clonally derived, and therefore provide a source for expressing large quantities of a particular fusion protein (i.e., see column 30). The reference teaches that the phage can be used to detect the presence of the receptor and the assay can be conducted on a sample such as biological fluid or tissue sample (i.e., see column 45); and the presence of antigen in a sample and assaying the presence of enzyme or receptor in body fluid sample (i.e,. see column 46). Thus, the reference

clearly teaches cellular protein on the surface of a cell (receptor). The reference further teaches that the sample can be liquid, such as natural, man-made, industrial, or biological waste or by product, urine, saliva, cerebrospinal fluid, blood, serum (may have antibodies, which are considered as cellular protein on the surface of the cell) and the like, or a solid or semi solid such as tissue, feces and the like, or alternatively a solid tissue commonly used in histological diagnosis (i.e., see paragraph bridging the columns 45 and 46).

The reference teaches methods of labeling the fusion proteins or the phage particles of the invention (refers to 'detectable virus' of the instant claims) (i.e,. see column 45). The reference teaches that the target material may be detected by the fusion protein of the instant invention when present in a sample of biological fluids and tissues (refers to the instant claim 'sample'). The reference teaches the method of detecting the presence of preselected target (selected polypeptide) in a sample comprising: a) admixing the sample containing the preselected target with the recombinant lambdoid bacteriophage of the invention, wherein the preselected target is a biologically active ligand or receptor (refers to instant claim 'cellular protein'); the lambdoid bacteriophage forms a complex with the preselected target; and detecting the presence of the complex thereby the presence of the preselected target (i.e., see column 46, claim 19). The reference teaches that the phage of the invention can be labeled when used in a diagnostic method of the invention (i.e., see column 8). The reference teaches that the sample can be blood, plasma, serum, tissue extract and body fluid sample (i.e., see column 47).

The claimed invention differs from the prior art teachings by reciting 'cellular protein the surface of a cell'. Maruyama et al teach target present in a sample; and the target is a preselected receptor, ligand, enzyme or a substrate, which is present in a biological sample such as urine,

blood, serum or tissue. The reference clearly teaches that the target is not purified or isolated from the sample. The target is present in the fluid sample or tissue sample. Thus, it is obvious that the target can be present on the cell surface. And it would have been obvious to one skilled in the art at the time the invention was made that the preselected target is not a isolated target, and a target which is present on the cell surface can be detected using the Maruyama method. A person skilled in the art would have been motivated to use the population of phage taught by Maruyama et al, to detect the proteins on the cell surface, such that the assay can be used in clinical samples to detect the disease cells or tissue.

Response to Arguments

12. Claims 1, 5, 9, 17, 45-51, 53, 55-56, 58-65, 67-68, 70-72 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 5,627,024 (Maruyama et al) (filing date 8/5/94).

The instant claims briefly recite methods for detecting the presence of a polypeptide in a sample by contacting the sample with a population of recombinant virus expressing the ligand for the polypeptide on the surface, and detecting the binding of the virus to the sample, and thus detecting the presence of the polypeptide.

Maruyama et al teach lambdoid bacteriophage vectors for expression and display of foreign proteins. The reference teaches that the phage library screening can be utilized to enrich the library for one or more particles expressing a multimer having a preselected substrate or ligand binding specificity. The reference further teaches that the phage library is a population of particles enriched for a preselected ligand binding specificity (refers to instant claim limitation 'each virus expressing on its surface the ligand for the polypeptide') (i.e., see column 30). The

reference teaches that the phage library comprises a population of particles, and hundreds of fusion proteins on the particle surface (refers to instant claim 'at least 10 copies of ligand', 'at least 100 copies of ligand', and 'at least 400 copies of ligand') depending on growth conditions and other factors (i.e,. see column 30). The reference teaches that the library of phage (monovalent phage) having the pV-derived membrane anchor will typically contain 1-4 copies of the ligand-binding complex on the surface of each particle, and a library of phage (polyvalent phage) having the pD-derived membrane anchor will typically contain 20-420 copies of the ligand-binding complex on the surface of each particle (refers to instant claim 'at least 10 copies of ligand', 'at least 100 copies of ligand', and 'at least 400 copies of ligand') (i.e., see column 15). The reference teaches that the population of phage express the same multimer on the particle surface and such phage are homogeneous and clonally derived, and therefore provide a source for expressing large quantities of a particular fusion protein (i.e., see column 30).

The reference teaches various methods that would utilize the biological activity of the fusion protein of the interest, for example to detect the presence, and preferably the amount of a preselected receptor (refers to instant claims 'selected polypeptide') ligand or enzyme with which the fusion protein binds to or reacts (i.e., see column 45). The assay can be conducted on a sample using fusion protein or phage displaying the fusion protein (refers to virus expressing on its surface) of the invention as a reagent (i.e., see column 45). The reference teaches methods of labeling the fusion proteins or the phage particles of the invention (refers to 'detectable virus' of the instant claims) (i.e,. see column 45). The reference teaches that the target material may be detected by the fusion protein of the instant invention when present in a sample of biological fluids and tissues (refers to the instant claim 'sample').

The reference teaches the method of detecting the presence of preselected target (selected polypeptide) in a sample comprising: a) admixing the sample containing the preselected target with the recombinant lambdoid bacteriophage of the invention, wherein the preselected target is a biologically active ligand or receptor (refers to instant claim 'cellular protein'); the lambdoid bacteriophage forms a complex with the preselected target; and detecting the presence of the complex thereby the presence of the preselected target (i.e., see column 46, claim 19). The reference teaches that the phage of the invention can be labeled when used in a diagnostic method of the invention (i.e., see column 8). The reference teaches that the sample can be blood, plasma, serum, tissue extract, and body fluid sample (i.e., see column 47). Thus, the reference clearly anticipates the claimed invention.

13. Applicant's arguments filed on 9/27/05 have been fully considered but they are not persuasive.

Applicants traverse the rejection. Applicant's arguments are based on the newly amended (9/27/05) claim limitations. Applicants argue that the reference Maruyama does not teach ligand for a protein on the surface of a cell.

Applicant's arguments have been fully considered and are not persuasive. Maruyama throughout specification teaches that the population of phage can be used in diagnostic assays. The reference teaches that the phage can be used to detect the presence of the receptor and the assay can be conducted on a sample such as biological fluid or tissue sample (i.e., see column 45); and the presence of antigen in a sample and assaying the presence of enzyme or receptor in body fluid sample (i.e,. see column 46). Thus, the reference clearly teaches cellular protein on

the surface of a cell (receptor). The reference further teaches that the sample can be liquid, such as natural, man-made, industrial, or biological waste or by product, urine, saliva, cerebrospinal fluid, blood, serum (may have antibodies, which are considered as cellular protein on the surface of the cell) and the like, or a solid or semi solid such as tissue, feces and the like, or alternatively a solid tissue commonly used in histological diagnosis (i.e., see paragraph bridging the columns 45 and 46). Even for argument sake if applicants say that the cellular protein on the surface of a cell is not present in the liquid sample, the reference clearly teaches solid or semi-solid biological sample, which inherently has the protein or the target on the surface of the cells. The reference further teaches that the method of detecting the presence of a preselected target (a cellular protein) in a sample comprising: a) admixing a sample containing the preselected target with a recombinant lambdoid bacteriophage of the invention, wherein the **preselected polypeptide** defines a **biologically active ligand or receptor** able to bind the preselected target and form target ligand or receptor complex, and detecting the complex. Thus, the reference teaches that the phage binds the target (protein on the surface of the cell).

Applicant's arguments regarding the teachings of the β-galctosidase is not persuasive. Since the reference clearly discloses the diagnostic assay and further teaches the use of the population of phage in detecting the presence of the target in the biological sample, the reference clearly anticipates the claimed invention.

14. Claims 1, 5, 9, 17, 45-51, 53, 55-56, 58-65, 67-68, 70-75 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,627,024 (Maruyama et al) and US Patent 5,922,545 (Mattheakis et al).

Maruyama et al has been discussed supra. The instant claims differ from the prior art teachings of Maruyama et al by reciting the 'virus is a filamentous bacteriophage; and 'coat protein pVIII.'

Maruyama et al teach the use of the lambdoid bacteriophage (lytic phage) in the method of detecting the presence of the polypeptide in the sample. Maruyama et al do not teach the filamentous phage particle library, wherein the coat protein is pVIII. However, Mattheakis et al teach improved methods and novel compositions for identifying peptides and single chain antibodies that bind to predetermined receptors or epitopes. The reference teaches methods of screening of bacteriophage peptide display library. The reference teaches fusion proteins composed of a antibody (vH and vL subunits) linked to the amino-terminus of filamentous bacteriophage coat protein typically pIII or pVIII. Thus, it would have been obvious to one skilled in the art at the time the invention was made to use filamentous phage coat protein pVIII instead of lambdoid phage taught by Maruyama et al, because the filamentous phage have more advantages, i.e., the filamentous phage do not kill the host, and extrude progeny phage from the cell. A person skilled in the art would have been motivated to use the filamentous phage to display proteins of interest because the filamentous phage would not kill the host and the phage is used in subsequent rounds of recombination.

15. Applicant's arguments filed on 9/27/05, regarding the rejection of claims over Maruyama et al and Mattheakis (US Patent 5,922,545) have been fully considered but they are not persuasive.

Applicants traverse the rejection. Applicant's arguments are based on the newly amended

(9/27/05) claim limitations. Applicants argue that the reference Maruyama does not teach ligand for a protein on the surface of a cell.

Applicant's arguments have been fully considered and are not persuasive.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The rejection of record is based on the combined teachings of Maruyama and Mattheakis. And further Maruyama et al teach the newly added limitations.

Maruyama throughout specification teaches that the population of phage can be used in diagnostic assays. The reference teaches that the phage can be used to detect the presence of the receptor and the assay can be conducted on a sample such as biological fluid or tissue sample (i.e., see column 45); and the presence of antigen in a sample and assaying the presence of enzyme or receptor in body fluid sample (i.e,. see column 46). Thus, the reference clearly teaches cellular protein on the surface of a cell (receptor). The reference further teaches that the sample can be liquid, such as natural, man-made, industrial, or biological waste or by product, urine, saliva, cerebrospinal fluid, blood, serum (may have antibodies, which are considered as cellular protein on the surface of the cell) and the like, or a solid or semi solid such as tissue, feces and the like, or alternatively a solid tissue commonly used in histological diagnosis (i.e., see paragraph bridging the columns 45 and 46). Even for argument sake if applicants say that the cellular protein on the surface of a cell is not present in the liquid sample, the reference clearly teaches solid or semi-solid biological sample, which inherently has the protein or the target on

the surface of the cells. The reference further teaches that the method of detecting the presence of a preselected target (a cellular protein) in a sample comprising: a) admixing a sample containing the preselected target with a recombinant lambdoid bacteriophage of the invention, wherein the **preselected polypeptide** defines a **biologically active ligand or receptor** able to bind the preselected target and form target ligand or receptor complex, and detecting the complex. Thus, the reference teaches that the phage binds the target (protein on the surface of the cell).

Applicant's arguments regarding the teachings of the β-galctosidase is not persuasive. Since the reference clearly discloses the diagnostic assay and further teaches the use of the population of phage in detecting the presence of the target in the biological sample.

Applicants argue that neither the reference teaches the elements, and the combination of the references *per force* fails to teach these elements.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Maruyama et al teach a population of phage displaying the ligand and methods of using the population of phage in diagnostic assays to detect the target in the biological sample. Thus, it would have been obvious to one skilled in the art at the time the invention was made to use the population of phage displaying the ligand to identify the target in a biological sample,

such as blood, serum, urine, or tissue sample. The target can be a receptor or antigen, or enzyme (which are present on the surface of the cell).

Applicants further argue that prior art does not provide a reasonable expectation of success that recombinant viruses expressing such a ligand could successfully bind to cells. Prior to the present invention it would not have been reasonably expectable that a ligand expressed on a recombinant virus would sterically accessible to a protein a cell's surface.

Applicant's arguments regarding the 'expectation of success' have been considered and are not persuasive. In response to applicant's argument that 'ligand successfully bind to cells' and 'ligand presented on the recombinant virus would sterically accessible to protein', the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Maruyama et al teach that the population of phage bind to the target present in a sample (a mixture), thus the target is not purified or isolated, and further the reference teaches biological sample such as blood, serum urine, or tissue which would have the protein of interest on the surface a cell. Thus Maruyama et al clearly teach the target is not isolated target, as in applicant's arguments. The target is present in a mixture and further the teachings of blood sample, serum sample, urine sample or tissue sample indicates that the target can be present on the surface of a cell. If applicants disagree applicants are requested to show that the reference teachings of target is not a cellular protein present on a cell surface.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., ligand

presented on the recombinant virus would sterically accessible to protein') are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's argument that there is no suggestion in the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case Maruyama et al teach that the population of phage bind to the target present in a sample (a mixture), thus the target is not purified or isolated, and further the reference teaches biological sample such as blood, serum urine, or tissue which would have the protein of interest on the surface a cell. Thus Maruyama et al clearly teach the target is not isolated target, as in applicant's arguments. The target is present in a mixture and further the teachings of blood sample, serum sample, urine sample or tissue sample indicates that the target can be present on the surface of a cell. And further, it would have been obvious to one skilled in the art at the time the invention was made to use the teachings of Maruyama et al to detect the presence of cellular protein on the surface a cell, wherein the cell is present in a biological sample, because Maruyama et al teach detecting the presence of target in biological fluid sample or tissue.

Thus, for the reasons discussed supra, the rejections of record have been maintained.

Allowable Subject Matter

16. Claims 54, 57, 66, 69 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

17. The following is a statement of reasons for the indication of allowable subject matter: The method of selecting polypeptides in the sample using N-methyl D-aspartate receptor, and ligands of the sequence SEQ I DNO: 2 or 3 is neither taught nor suggested by the prior art.

Conclusion

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Padmashri Ponnaluri whose telephone number is 571-272-0809. The examiner can normally be reached on Monday through Friday between 7 AM and 3.30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Wang can be reached on 571-272-0811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Padmashri Ponnaluri
Primary Examiner
Art Unit 1639

22 December 2005